

AGENDA NOTE – HRPDC EXECUTIVE COMMITTEE MEETING

ITEM #12: CHESAPEAKE BAY TOTAL MAXIMUM DAILY LOAD (TMDL)

A. EPA RESPONSE TO HRPDC LETTER

SUBJECT:

Mr. Jeff Corbin, Senior Advisor to the EPA Administrator for Chesapeake Bay, has responded to the Commission's letter regarding its concerns with the Chesapeake Bay TMDL.

BACKGROUND:

The EPA responded to the questions raised in the HRPDC letter dated March 31, 2011 (Attachments A/B). HRPDC staff identified the following key points:

- The EPA and State have not reached a resolution on whether or not to remove the individual Waste Load Allocations (WLA) from the TMDL for the Phase I MS4s (Chesapeake, Hampton, Newport News, Norfolk, Portsmouth, Virginia Beach).
- Phase I MS4 WLAs included nutrient loads for other National Pollutant Discharge Elimination System (NPDES) permittees (military installations, industrial facilities, etc.) located within the locality boundaries.
- MS4 permits will be based on Maximum Extent Practicable (MEP) standard.
- EPA might consider adjustments in the implementation schedule for MS4 nutrient reductions based on the MEP standard.

Whitney Katchmark, Principal Water Resources Engineer, will provide a presentation summarizing the responses and the region's potential next steps.

RECOMMENDED ACTION:

The HRPDC Chesapeake Bay TMDL Subcommittee should reconvene during the first week of June to draft follow up questions for the EPA and state agencies. Authorize the Chairman to respond to Jeff Corbin, EPA, and Anthony Moore, Virginia's Assistant Secretary for Chesapeake Bay Restoration, based on the Subcommittee's recommendations.

Attachment 12A HRPDC letter to Corbin
12B Corbin's response to HRPDC

B. PHASE II WATERSHED IMPLEMENTATION PLAN (WIP) UPDATE

SUBJECT:

Virginia has requested the Hampton Roads Planning District Commission support the State's effort to develop the Phase II Watershed Implementation Plan (WIP).

BACKGROUND:

Virginia has developed a framework for Statewide WIP development. Ms. Joan Salvati, Acting Regulatory Program Manager, DCR Division of Stormwater Management presented the state's concept to the HRPDC Joint Environmental Committee on May 5, 2011 (Attachment C). Virginia's framework would utilize PDCs to coordinate development of "Community Conservation Information" containing locality scale resource assessment, source identification, baseline assessment, program evaluation, and conservation strategies. HRPDC staff developed talking points for the Chesapeake Bay Local Government Advisory Committee (LGAC) representatives from Hampton Roads to summarize concerns with the Phase II WIP process (Attachment D).

HRPDC staff recommends a two tier approach to develop the region's input for the Phase II WIP. The regional tier would be a steering committee with members from local government staffs, HRSD, Soil and Water Conservation Districts, Virginia Health Department, Department of Defense, VDOT, other state agencies and local environmental groups with the caveat that they are non-voting members. Each locality would designate one or two representatives that could represent all departments in their locality. The regional steering committee would develop agreements between sectors and identify the nutrient reduction commitments from non-locality entities.

The local tier of this approach would be a multi-department team in each locality. Team members should include the CAO or his/her representative and staff from public works, utilities, planning, GIS, parks and recreation, legal counsel, economic development, and the school board. The locality teams would identify the feasible nutrient reductions that could be implemented by the locality. Implementation strategies might include: stormwater retrofits at parks, schools, and municipal centers; development of green streets, new nutrient management techniques or materials to maintain ballfields and golf courses; no discharge zones in tidal waters; increased tree canopy requirements, increased street sweeping; septic tank pump-outs or upgrades; increased sewer maintenance or recordkeeping to quantify leaks and overflows; proffers from new development; financial incentives for private property partners.

Whitney Katchmark, Principal Water Resources Engineer, will review the State's expectations for regional data collection and implementation strategies and the HRPDC staff's proposed approach.

RECOMMENDED ACTION:

Notify the State that HRPDC staff will coordinate data collection and facilitate development of implementation strategies for the localities in the region

Attachments: 12C Phase II Engagement presentation from DCR
12D HRPDC Talking Points on Phase II WIP

MEMBER JURISDICTIONS

March 31, 2011

CHESAPEAKE

Mr. Jeffrey Corbin
Senior Advisor to the Administrator
U.S. Environmental Protection Agency, Region III
Ariel Rios Building
1200 Pennsylvania Avenue, NW
Washington, DC 20460
Corbin.jeffrey@epamail.epa.gov

FRANKLIN

GLOUCESTER

HAMPTON

RE: Chesapeake Bay TMDLs

ISLE OF WIGHT

Dear Mr. Corbin:

JAMES CITY

Thank you for attending the March 31, 2011 special meeting of the Commission's Executive Committee and for presenting EPA's perspective on the Chesapeake Bay Total Maximum Daily Loads (TMDL).

NEWPORT NEWS

NORFOLK

POQUOSON

PORTSMOUTH

SOUTHAMPTON

SUFFOLK

SURRY

VIRGINIA BEACH

As you know from recent reports in the media, the Commission has been evaluating the potential impacts of the TMDL on its member localities that operate Municipal Separate Storm Sewer Systems (MS4s) together with legal options for addressing any flaws in the TMDL that could cause adverse socio-economic impacts on the Hampton Roads region without providing any meaningful water quality benefit. Based on that evaluation, we have concluded that there are legitimate reasons to be concerned about the potential impacts of certain aspects of the TMDL. Those concerns, however, largely reflect uncertainty about the outcome of the Phase II Watershed Implementation Plan (WIP) process now underway as well as EPA's intentions with respect to the way in which the Hampton Roads region's MS4 permits must be written to be consistent with the assumptions and requirements of the TMDL. Therefore, the Commission wishes to know EPA's answers to the following questions so that we can make the best informed assessment of the TMDL's likely impact on the region's MS4 localities. The Commission has decided to defer further consideration of its legal options pending receipt of EPA's response.

WILLIAMSBURG

To put the questions in context, the Commission wishes to make clear that it and its member MS4 localities are supportive of the TMDL's goals as reflected in their ongoing commitment of significant resources to implementation of the

YORK

Hampton Roads region's MS4 programs. No other region of Virginia has a greater stake in a clean Bay than Hampton Roads, and as stated in the Commission's comments on the draft TMDL, the region's MS4 localities are prepared to commit more money and resources to their storm water programs where needed to help restore the Chesapeake Bay and protect the James and York rivers. However, the Commission and its member MS4 localities believe that a clean Bay can be attained without wasting scarce resources or exposing the MS4 localities to enforcement actions for failing to achieve unrealistic and unattainable TMDL-derived compliance obligations. Unfortunately, it appears that these may well be the consequences of several flaws in the TMDL as reflected in the following issues of greatest concern to the Commission and the MS4 localities. I want to emphasize that the Commission and the MS4 localities believe the TMDL is flawed in other respects, but they are most concerned with the following issues because they are likely to have the greatest impact on the MS4 localities.

I. Issues of Greatest Concern

A. Land Use Data Used to Derive the MS4 WLAs

The waste load allocations (WLAs) in the TMDL are based on land use data, specifically the amount of impervious area within the locality. An analysis of representative Geographic Information System (GIS) land use data shows that the satellite imagery used by EPA for its land use inputs to the watershed model underestimates the extent of imperviousness in the Hampton Roads region by an average of approximately 48 percent. Locally developed imperviousness data is more accurate than the satellite imagery relied on by EPA, but EPA did not take the time to work with the Hampton Roads' localities to collect this information and use it in the model. EPA has acknowledged that the land use data used to develop the TMDL is inaccurate and has stated that it plans to develop revised load reduction estimates based on revised imperviousness data. However, we understand that EPA intends to continue using satellite imagery rather than local GIS data.

The implications of underestimated imperviousness are significant because it means that the Hampton Roads localities, including those with MS4 permits, will have to reduce their urban runoff loads based on modeling data which assumes that they are less impervious than they actually are. In other words, the urban land area that will have to be treated in order to attain the WLAs would be greater than the land area assumed in the TMDL. This has potentially serious implications for not only the ultimate cost of compliance, but also the ability of the MS4 localities to achieve their WLAs by the TMDL's 2025 deadline.

B. Establishment of Individual WLAs for the Hampton Roads Phase I MS4s

EPA should not have included individual WLAs for Virginia's Phase I MS4 localities (including the six Phase I MS4 localities in Hampton Roads) in the final TMDL. The individual WLAs were not included in the draft TMDL, so there was no notice of or opportunity to comment on the WLAs before they were established in violation of the Administrative Procedures Act. We are also troubled by the fact that Virginia's Phase I MS4s were singled out for individual WLAs as well as EPA's failure to provide any justification for adding the individual WLAs or explanation of how they were derived.

As you know, EPA and the Bay states agreed that not enough information was available during the TMDL development process to generate individual WLAs for MS4s, and therefore, agreed to defer dividing aggregate point source targets to a finer scale until the Phase II WIP process. Accordingly, we suspect that the individual WLAs are based on the same inaccurate land use data that was used to derive the proposed aggregate WLAs in the draft TMDL, but we have no way of knowing whether this is, in fact, the case or whether other errors are built into the WLAs because EPA has not explained how the individual WLAs were derived. In particular, we strongly suspect that the individual WLAs for Total Suspended Solids (TSS) are inaccurate because in addition to the use of inaccurate land use data, the TSS WLAs were derived using a model that EPA has acknowledged could not be calibrated for sediment.

The potential consequences are far reaching because the Phase I MS4 localities would be at significant risk of federal, state, and citizen enforcement for failure to comply with their permits if EPA proceeds with TMDL implementation using individual Phase I MS4 WLAs derived from erroneous land use data.

C. 2025 Deadline

As explained in the Commission's comments on the draft TMDL, we do not believe EPA has the authority to establish a deadline in the TMDL. MS4s are uniquely affected by the 2025 deadline because they are regulated as point sources, but face far greater implementation challenges than any other source sector, point or non-point. The MS4 WLAs will require widespread implementation of storm water retrofits on private property in a heavily urbanized region. The MS4 localities could implement these retrofits cost effectively through their land use approval process as redevelopment occurs, but the 2025 deadline will make it impossible for the MS4s to achieve their WLAs in this fashion because the average rate at which land is redeveloped will

not allow it. Instead, the MS4 localities will be forced to not only install and operate storm water retrofits on private property, but also to acquire retrofit easements by purchase or condemnation. Again, the potential consequences are far reaching. Aside from the cost, easement acquisition takes time, making it highly unlikely that the MS4s could achieve their WLAs by 2025, thereby exposing them to federal, state, and citizen enforcement despite their best efforts to comply.

II. Questions for EPA.

While the Commission and the MS4 localities believe their concerns are well founded, they wish to hear from EPA. Therefore, it will be greatly appreciated if EPA will answer the following questions.

A. Hampton Roads MS4 WLAs

1. Why does the final TMDL include individual WLAs for the Phase I MS4s in Virginia, but not the Phase I MS4s in the other Bay states?
2. Why weren't the individual WLAs included in the draft TMDL?
3. How did EPA derive the individual WLAs for the Hampton Roads Phase I MS4s?
 - i. What MS4 boundaries were used?
 - ii. Did the WLA calculations for the Phase I MS4s include areas in the Phase I boundaries that are covered by other permits held by private companies, the state, or federal agencies?
4. Is EPA prepared to work with the Hampton Roads localities during the Phase II WIP process to ensure that the urban runoff WLAs reflect the most accurate land use data available, including the available GIS data?
5. Under what circumstances will EPA modify the WLAs at the conclusion of the Phase II WIP process?

Specifically:

- a. The EPA has agreed to run the Bay model with revised land use data in 2011. Will the WLAs be revised if the WLAs increase for some Phase I MS4s?

- b. Why were Total Suspended Solids (TSS) WLAs included in the TMDL given EPA's acknowledgement that the Bay model could not be calibrated for sediment?
 - c. Does EPA intend to distribute any of the 9.5 percent TSS load reserve in the James River Basin or the 9.2 percent TSS load reserve in the York River Basin to Hampton Roads MS4s as part of the Phase II WIP process?
 - d. Can all of the MS4 sector WLAs be revised as part of the Phase II WIP process if the basin allocations are met?
6. How can the Hampton Roads region follow the Phase II WIP process when the Department of Conservation and Recreation (DCR) has already started writing permits based on the individual Phase I MS4 WLAs? EPA's Phase II WIP Fact Sheet states as follows:
- “EPA expects the Bay jurisdictions to develop Phase II WIPs that further divide final nonpoint source and aggregate point source target loads for the 92 303(d) segment drainage areas using a finer geographic scale such as counties, conservation districts, sub-watersheds, or, where appropriate, individual sources or facilities. EPA expects the local targets to be used for planning purposes and does not intend to establish local targets as separate allocations within the Bay TMDL.”
7. The Hampton Roads localities are already investing in programs that will reduce nutrient loads. Existing EPA documentation indicates that the localities cannot count these programs as efforts to meet the TMDL. How can localities get credit for investments that reduce Sanitary Sewer Overflows (SSOs)? Implementing no discharge zones for boats? Increasing oyster restoration?
 8. Will EPA count nutrient load reductions from non-structural BMPs like nutrient management and the fertilizer ban as MS4 reductions or treat them as nonpoint source reductions?
 9. Virginia's BMP efficiencies and EPA's model BMP efficiencies are not equivalent. Will EPA defer to Virginia's BMP efficiencies to assess compliance?

B. 2025 Deadline

1. Will EPA expect DCR to include compliance schedules designed to meet the applicable WLAs by the 2025 deadline in the Phase I MS4 permits when they are reissued and in the Phase II MS4 general permit when it is reissued?
2. NPDES (MS4) permits will be the enforcement tool to implement TMDL-based storm water nutrient reductions. NPDES storm water permits are based on the "maximum extent practicable" (MEP) standard. The evaluation of the MEP standard includes technical and economic achievability. Will the EPA consider adjusting the timeline for storm water load reductions in the TMDL if the existing timeline is not reasonably achievable?

We ask that EPA respond to the questions in writing within 30 days of the date of this letter. Should EPA choose not to answer the questions, we would appreciate knowing that as well within the next 30 days. EPA's responses to the questions may well lead to additional questions so it would be helpful to arrange a meeting as soon as possible to discuss the questions and answers before EPA responds in writing.

Thank you for your consideration of this request and we look forward to hearing from you at the earliest opportunity. Please contact the Commission's Deputy Executive Director, John Carlock at 757.420.8300 or at jcarlock@hrpdcva.gov if you wish to discuss this matter further.

Sincerely,



Stan D. Clark
Chairman

copy: Douglas Domenech, Secretary of Natural Resources
Anthony Moore, Assistant Secretary for Chesapeake Bay Restoration
David A. Johnson, Director, Virginia Department of Conservation and Recreation
David K. Paylor, Director, Virginia Department of Environmental Quality
Hampton Roads General Assembly Delegation
HRPDC Commissioners
Dwight L. Farmer, Executive Director, Hampton Roads Planning District Commission
John M. Carlock, Deputy Executive Director, Hampton Roads Planning District Commission
David E. Evans, McGuireWoods, LLP



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

May 3, 2011

Mr. Stan D. Clark
Chairman, Hampton Roads Planning District Commission
The Regional Building
723 Woodlake Drive
Chesapeake, Virginia 23320

Dear Chairman Clark,

I want to thank you for the opportunity to appear before the Hampton Roads Planning District Commission when they met in special session on March 31st. It was a privilege to speak about EPA's Total Maximum Daily Load (TMDL) for the Chesapeake Bay and the critical role that Virginia's Watershed Implementation Plan (WIP) will play in restoring the health of Virginia waters.

As I said at the beginning of my remarks, while I can't guarantee that EPA's responses will alleviate every concern expressed by Commission members, I feel very strongly that continued, open, frank dialogue between all parties is essential – and can only help to resolve conflicts.

I believe that Commission members, as stated at the meeting and in your follow-up letter, are committed to protecting and restoring waters in the Hampton Roads region. In an effort to answer questions that the Commission has submitted to EPA, clarify remaining uncertainties, and correct any misinformation that may exist, please find attached a detailed response to your letter dated March 31st.

This response represents input from many EPA experts who have been involved with the development of the TMDL, evaluation of the states' WIPs, and implementation of Bay

restoration efforts for many years. I trust that you will find this response helpful as the Commission continues to work with the Commonwealth of Virginia on development of its Phase II WIP and implementation of necessary restoration activities.

Please do not hesitate to contact me if I can be of further assistance.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jeff Corbin', with a stylized flourish at the end.

Jeff Corbin
Senior Advisor

Attachment

Cc:

Lisa P. Jackson, Administrator

Robert Perciasepe, Deputy Administrator

Shawn Garvin, Regional Administrator

Douglas Domenech, Secretary of Natural Resources

Anthony Moore, Assistant Secretary for Chesapeake Bay Restoration

David A. Johnson, Director, Virginia Department of Conservation and Recreation

David K. Paylor, Director, Virginia Department of Environmental Quality

Dwight L. Farmer, Executive Director, Hampton Roads Planning District Commission

II. Questions for EPA.

A. Hampton Roads MS4 WLAs

1. Why does the final TMDL include individual WLAs for the Phase I MS4s in Virginia, but not the Phase I MS4s in the other Bay states?

Response: The Commonwealth of Virginia's final WIP submission and discussions with the Virginia Department of Conservation and Recreation (DCR) in the fall 2010 were the basis for EPA's inclusion of individual WLAs in the final TMDL. Other jurisdictions included discussion of more specific, anticipated permit requirements in their Phase I WIPs to explain how MS4s would meet aggregate WLAs, thus providing EPA with sufficient assurance that compliance with aggregate WLAs would be achieved. After EPA established the TMDL, VA DCR expressed some concerns about individual WLAs. We are currently in discussions with DCR to explore options for proposed refinements to the VA WIP and TMDL in Phase II and will stay in touch with the MS4 jurisdictions.

2. Why weren't the individual WLAs included in the draft TMDL?

Response: The draft TMDL proposed aggregate "backstop" WLAs for urban stormwater in which EPA assumed different retrofit and redevelopment standards than what the Commonwealth proposed in its draft Phase I WIP. Based on Virginia's final WIP submission and discussions with VA DCR to remove the draft "backstop" WLAs, EPA established final WLAs that assumed the same stormwater management actions as Virginia proposed in its final Phase I WIP. In order to increase EPA's assurance that Phase I MS4 jurisdictions would achieve these WLAs, EPA established individual WLAs for Phase I MS4 jurisdictions as described in the previous response.

3. How did EPA derive the individual WLAs for the Hampton Roads Phase I MS4s?
i. What MS4 boundaries were used?

Response: EPA used the boundaries illustrated in Figure 4-12 of the Chesapeake Bay TMDL to define the boundaries for the 11 Phase I MS4 jurisdictions in Virginia. These boundaries align with the boundaries of MS4 jurisdictions.

- ii. Did the WLA calculations for the Phase I MS4s include areas in the Phase I boundaries that are covered by other permits held by private companies, the state, or federal agencies?

Response: Yes. EPA identified all loads associated with urban stormwater within each Phase I jurisdiction as currently regulated and included them within the individual WLA for the Phase I MS4. EPA did not have sufficient data to assign separate aggregate or individual WLAs for urban stormwater to sources subject to construction or industrial stormwater permits, or other NPDES permits for urban stormwater within the Phase I jurisdictions. Accordingly, loads associated with urban stormwater discharges that are regulated under separate permits were included in the individual WLA associated with the MS4 jurisdiction. However, by including such loads in the MS4 WLA, EPA does not assume that the NPDES permit requirements for the Phase I MS4 jurisdictions include any conditions or controls for regulating the activities of other NPDES permittees. EPA expects Virginia to continue to issue urban stormwater permits to other non-Phase I MS4 sources within Phase I jurisdictions, and that those permit conditions and controls are consistent with assumptions for nitrogen, phosphorus and sediment reductions and stormwater management actions associated with the Bay TMDL WLAs and Virginia's Watershed Implementation Plan.

4. Is EPA prepared to work with the Hampton Roads localities during the Phase II WIP process to ensure that the urban runoff WLAs reflect the most accurate land use data available, including the available GIS data?

Response: Yes. EPA will work with the Commonwealth and the localities during the Phase II process to ensure that the latest GIS and other data are factored into the “data input deck” of practices that will be implemented on urban lands in the Hampton Roads region. The primary role for preparing a Phase II WIP rests with the Commonwealth’s environmental agencies.

EPA is not making additional modifications to the data used in Phase 5.3.2 of the Watershed Model in 2011 beyond the updates to address the land cover and nutrient management changes agreed upon by the Chesapeake Bay Principals’ Staff Committee. The agreed-upon land cover update, which will be used for the Phase II WIPs, is more consistent with local land use data where such data are available. If there are additional suggestions for simulating urban land uses in the Hampton Roads region or elsewhere in the watershed, EPA will work with localities and the Commonwealth to evaluate these options as part of the model reviews that will be happening in advance of the Phase III WIPs in 2017.

5. Under what circumstances will EPA modify the WLAs at the conclusion of the Phase II WIP process?

Specifically:

- a. The EPA has agreed to run the Bay model with revised land use data in 2011. Will the WLAs be revised if the WLAs increase for some Phase I MS4s?

Response: Yes. As described in the *Guide for Chesapeake Bay Jurisdictions for the Development of Phase II Watershed Implementation Plans*, one purpose of the Phase II WIPs is for the 7 Bay jurisdictions, in consultation with their local partners, to propose refinements to the TMDL allocations based on the agreed upon Chesapeake Bay Watershed Model updates. Following the Phase II WIP process, EPA intends to make revisions to the TMDL and WLAs if necessary and appropriate. In doing so, EPA will rely heavily on what the Commonwealth of Virginia proposes as modifications to its Phase II WIP, assuming the changes are designed to implement water quality standards.

- b. Why were Total Suspended Solids (TSS) WLAs included in the TMDL given EPA’s acknowledgement that the Bay model could not be calibrated for sediment?

Response: EPA disagrees that the Bay models are not calibrated for sediment. The Watershed Model Phase 5.3 and the Water Quality Sediment Transport Model of the Bay are calibrated for sediment. The number of sediment calibration stations increased from approximately 15 in the Watershed Model Phase 4.3 to 200 in Phase 5.3 used for the TMDL. The Water Quality Sediment Transport Model also provides a better calibration of sediment than previous model versions.

- c. Does EPA intend to distribute any of the 9.5 percent TSS load reserve in the James River Basin or the 9.2 percent TSS load reserve in the York River Basin to Hampton Roads MS4s as part of the Phase II WIP process?

Response: EPA will rely heavily on what the Commonwealth of Virginia proposes as modifications to its Phase II WIP, assuming the changes are designed to implement water quality standards. Virginia may propose reallocations of the load reserve. The Phase II WIP process allows Bay jurisdictions, working with their partners, to propose to EPA how to divide the nitrogen, phosphorus and sediment allocations for each major basin among the pollutant sources - including any reserves. This is first and foremost a state decision, with EPA providing oversight to ensure that pollutant discharges are consistent with TMDL and NPDES

requirements and that water quality standards are attained in all tidal segments of the Bay and its tributaries.

- d. Can all of the MS4 sector WLAs be revised as part of the Phase II WIP process if the basin allocations are met?

Response: Yes. Through the Phase II WIPs, Virginia and the other six Bay jurisdictions may propose refinements to the TMDL wasteload and load allocations. EPA will determine appropriate revisions to the WLAs based primarily on whether: 1) such proposed refinements would meet water quality standards in all tidal segments of the Bay; and 2) the jurisdiction has demonstrated assurance that these allocations will be achieved and maintained.

6. How can the Hampton Roads region follow the Phase II WIP process when the Department of Conservation and Recreation (DCR) has already started writing permits based on the individual Phase I MS4 WLAs? EPA's Phase II WIP Fact Sheet states as follows:

“EPA expects the Bay jurisdictions to develop Phase II WIPs that further divide final nonpoint source and aggregate point source target loads for the 92 303(d) segment drainage areas using a finer geographic scale such as counties, conservation districts, sub-watersheds, or, where appropriate, individual sources or facilities. EPA expects the local targets to be used for planning purposes and does not intend to establish local targets as separate allocations within the Bay TMDL.”

Response: Full achievement of the TMDL WLAs for urban stormwater may occur over multiple permit cycles so long as there is a demonstration that controls are being carried out to the Maximum Extent Practicable. Virginia's Phase I WIP commits to full conformance with the TMDL WLAs over 3 permit cycles, or 15 years. According to the WIP, the first permit cycle focuses on institutional changes necessary to achieve stormwater reductions and only assumes a 5% reduction in loads. As a result, some refinements can be made in the TMDL WLAs before the final compliance dates come due with little risk that permits issued this year would ‘overshoot’ reduction targets contemplated in VA’s Phase II WIP.

EPA will continue to work closely with VA DCR on both the content of permit proposals and their linkage to the current TMDL and any refinements resulting from the Phase II WIP process. EPA will consider MS4 jurisdictions’ input as it reviews individual permits and, working with DCR, will help explain permit and fact sheet provisions issued by DCR. EPA believes that through compliance staging, allocation refinements can be accommodated without further delaying the reissuance of MS4 permits in the Tidewater region which expired in 2006.

7. The Hampton Roads localities are already investing in programs that will reduce nutrient loads. Existing EPA documentation indicates that the localities cannot count these programs as efforts to meet the TMDL. How can localities get credit for investments that reduce Sanitary Sewer Overflows (SSOs)? Implementing no discharge zones for boats? Increasing oyster restoration?

Response: EPA acknowledges the important actions of HRSD to reduce nutrient loads including those efforts to address SSOs under the recently entered Consent Decree between EPA, Virginia and HRSD. *US & Virginia v HRSD*, Civil Action No. 2:09-cv-481 (E. D. Va). Under the CWA, SSOs are unauthorized discharges and therefore are not assigned a permit number or WLA in the TMDL. Therefore no additional credit can be given for removal of such SSOs, even though it is an important regulatory requirement and a component of restoring the local water quality and protecting public health. EPA looks forward to continued progress on reduction of SSOs under the framework of the consent decree.

EPA will give credit in the Phase II WIPs and annual progress assessments for practices that 1) have been approved through the Chesapeake Bay Program Partnership's protocol; and 2) were implemented in 2006 or later, after the Watershed Model calibration time period. Partners may initiate a Chesapeake Bay Program review of practices at any time through the Chesapeake Bay Program Water Quality Goal Implementation Team (WQGIT) and the relevant WQGIT sector workgroup.

Jurisdictions may include "placeholder BMPs" in their Phase II WIPs for practices that have not yet been approved so long as they 1) submit supporting documentation; 2) EPA agrees to nitrogen, phosphorus and TSS reduction values; and 3) the practice is reviewed and approved through the Chesapeake Bay Program protocol prior to reporting in an annual progress assessment. EPA is willing to work with Virginia to consider crediting oyster restoration and no-discharge zones as placeholder BMPs.

8. Will EPA count nutrient load reductions from non-structural BMPs like nutrient management and the fertilizer ban as MS4 reductions or treat them as nonpoint source reductions?

Response: Yes. EPA can count nutrient load reductions from non-structural BMPs when they are reported and verified by the state in annual progress reports. If Virginia reports urban nutrient management and fertilizer bans within MS4 jurisdictions where the loads from urban stormwater are included in the Bay TMDL WLAs, those MS4 jurisdictions will receive credit toward meeting TMDL WLAs.

9. Virginia's BMP efficiencies and EPA's model BMP efficiencies are not equivalent. Will EPA defer to Virginia's BMP efficiencies to assess compliance?

Response: No. As discussed above, EPA will only use BMP definitions and efficiencies approved by the Chesapeake Bay Program Water Quality Goal Implementation Team for annual progress assessments. While EPA doesn't "defer" to the efficiencies used by Virginia, there is an established process in place for Virginia to propose a revision to the efficiencies currently used in the Bay Watershed Model. Additionally, in their Phase II WIPs, Virginia and other jurisdictions may take credit for nitrogen, phosphorus and sediment reductions resulting from "placeholder BMPs" so long as Virginia 1) submits supporting documentation; 2) EPA agrees to a nitrogen, phosphorus and sediment reduction value; and 3) Virginia commits to have the BMP reviewed and approved through the Chesapeake Bay Program protocol prior to reporting it in an annual progress assessment.

B. 2025 Deadline

1. Will EPA expect DCR to include compliance schedules designed to meet the applicable WLAs by the 2025 deadline in the Phase I MS4 permits when they are reissued and in the Phase II MS4 general permit when it is reissued?

Response: Yes. The Chesapeake Bay Executive Council, comprised of governors of the Bay states, the Mayor of the District of Columbia, the Chair of the Chesapeake Bay Commission, and the Administrator of EPA, set a goal that all practices necessary to restore the Bay be in place by no later than 2025. EPA referenced this goal in the Chesapeake Bay TMDL, and jurisdictions set strategies to meet this goal in their Phase I WIPs. EPA assumes that jurisdictions will use their permitting and other authorities to ensure that practices to reduce loads from point and nonpoint sources are in place as soon as possible but not later than 2025 as part of their efforts to meet this shared commitment. EPA will assess progress toward this goal.

May 3, 2011

At the present time based on the information at hand EPA believes the existing timeline should be adequate to achieve the necessary reductions. However, the crafting of an appropriate compliance schedule for each permit will be governed by Clean Water Act regulatory requirements, e.g., 40 CFR 122.47, as well as state regulations governing NPDES permits. The schedules would be proposed by DCR in a public process and be subject to EPA review on a facility-by-facility basis.

2. NPDES (MS4) permits will be the enforcement tool to implement TMDL-based storm water nutrient reductions. NPDES storm water permits are based on the “maximum extent practicable” (MEP) standard. The evaluation of the MEP standard includes technical and economic achievability. Will the EPA consider adjusting the timeline for storm water load reductions in the TMDL if the existing timeline is not reasonably achievable?

Response: Yes. On a case-by-case basis EPA would consider a request to adjust the timeline, although at the present time based on the information at hand EPA believes the existing timeline should be adequate to achieve these reductions.

Of course, the state NPDES authority has discretion to consider a number of factors in determining an appropriate compliance schedule. The determination of what is appropriate for each permit will be determined at the time of permit renewal.

MS4 permits are not the only avenue for achieving stormwater nutrient reductions. The Virginia Phase I WIP proposed to achieve significant urban nutrient reductions through a state-wide program to restrict turf grass fertilizer use. Other turf grass fertilizer restriction programs around the country have demonstrated very rapid nutrient reductions in receiving streams. As discussed above, if adopted, such reductions could be counted towards achieving the jurisdictions’ WLAs or LAs.

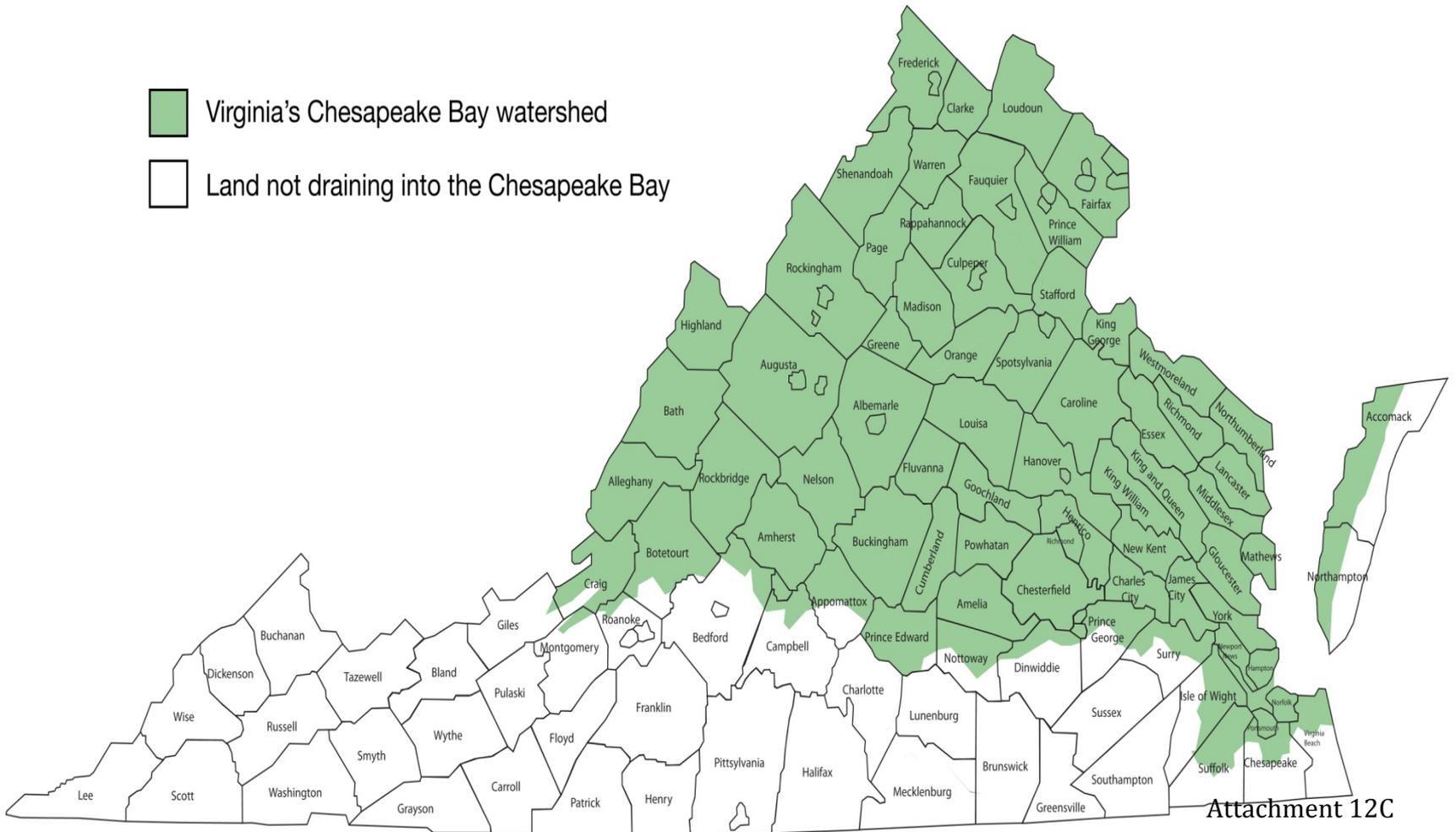


Virginia Chesapeake Bay TMDL Watershed Implementation Plans (WIP) – Phase II



Virginia' Chesapeake Bay Watershed

-  Virginia's Chesapeake Bay watershed
-  Land not draining into the Chesapeake Bay





Phase II Goals

- Further divide the 39 segment shed allocations (as identified in WIP I) to a more local scale
- Work with local elected officials, staff, soil & water conservation districts, stakeholder organizations and citizens to identify strategies to be implemented
- Provide additional detail on practices and strategies to be implemented by 2017
- Include updates resulting from revisions to the Bay Watershed Model
- Include specific programs and practices in the first 2-year milestone (2012-1213)

Phase II Project Elements

- Development of Local Reduction Goal for each of the 96 localities
- Local Engagement
- Local development of Community Conservation Information (CCI)
- Phase II WIP Development
- 2012/2013 Milestone Development

Virginia's Phase II Approach

Local Goal Load Development

- Utilize the Bay Model outputs to distribute the source-segment Bay TMDL allocations and WIP I BMPs to the local scale
 - Land Use / Land Cover
 - All source and segment loads aggregated to a single local goal for each pollutant
 - BMPs accounted for in the model
 - 2009 Progress BMPs
 - WIP I BMPs
 - BMPs scenario to meet Goal Load
- The local reduction goals and associated BMPs will be the starting point for localities to work from during the Phase II WIP development process
- Data will be revised upon EPA completion of the Phase 5.3.2 model (July/August)
- Absent any input from localities, these data will be used as the default values for the Phase II WIP

Local Engagement Process

- Secretary's Office presentations to 16 PDCs – 15 completed
- Follow-up discussions with PDCs to explore their interest in participating - initiated
- Meeting with PDC staff
 - More detail on Phase II process
 - Discuss of the Community Conservation Information
 - Discuss potential roles with PDCs
 - Technical
 - Facilitation
 - Neither/both
 - Ability/capacity/resources (available and needed)

Virginia's Phase II Approach

Local Engagement & Outreach Process (cont.)

- Meeting with PDCs, Localities, SWCDs and other stakeholders
 - Overview of Phase II process
 - Discussion of desired local deliverables
 - Current BMPs
 - Land Use / Land Cover
 - Strategies
 - Resource needs
 - Discussion of timeline
 - Provide local goals and model output data
 - Provide assessment tool for evaluation of scenarios
- Ongoing support and technical assistance

Virginia's Phase II Approach

Community Conservation Information

- Baseline Data
 - Goal loads and model outputs for localities
 - Locally available data (land use, BMPs on the ground, etc.)
- Resource Assessment
 - Local conditions
 - Incorporate local data into assessment tool
 - Source identification
- Existing Program Evaluation
- Conservation Strategies
 - 2017 Implementation goals
 - 2025 Strategies
- Identify additional resources and programs required to achieve implementation goals
 - Estimate costs of local implementation

Virginia's Phase II Approach

2012 – 2013 Milestone Development

- Evaluate Phase I WIP actions
- Evaluate 2011 milestone actions and contingencies
- Identify new State programs (Fertilizer control, Enhanced Nutrient Credit Exchange Program, etc.)
- Develop 2012-2013 Actions
- Identify additional resources required to achieve implementation goals
- Submit preliminary milestones to EPA (11/1/2011)
- Submit final milestones to EPA (1/03/2012)

Potential Role of PDC

- Technical
- Facilitation
- Neither/both
- Capacity/resources - available and needed

Project Schedule

- Draft Local Goals to Localities - 06/01/2011
- EPA Delivers Phase 5.3.2 Model – 07/1/2011
- Final Local Goals to Localities - 08/01/2011
- Local Conservation Strategies Finalized – 11/01/2011
- Preliminary 2012-2013 Milestones to EPA - 11/01/2011
- Draft Phase II WIP to EPA - 12/01/2011
- Final 2012-2013 Milestones to EPA - 01/03/2012
- Final Phase II WIP to EPA – 03/30/2012

How the PDC can help

- Assist local governments with collection of local land use and BMP data
- Evaluate model information related to loads, land uses, 2009 and 2025 BMP implementation level and compare to local data
- Work with localities identify additional BMPs and strategies to implement them

How the State can help

- Continued engagement and some technical assistance
- Provide “Assessment Tool”
- Pass through EPA contract assistance
- Possible grants

Questions?

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Talking points for Hampton Roads participation in the development of Virginia's Phase II Watershed Implementation Plan (WIP) for the Chesapeake Bay TMDL

Following the establishment of the Chesapeake Bay TMDL in December 2010, Virginia is required to develop a Phase II WIP that will:

1. Divide the TMDL allocations into local area targets.
2. Involve local stakeholders to identify strategies to reduce loads.
3. Provide additional detail on programs, technologies, and practices to be implemented by 2017.

Virginia has developed an approach to develop the Phase II WIP and has begun the local engagement and outreach process. The Assistant Secretary of Natural Resources briefed the HRPDC on March 30, 2011 and invited the HRPDC to participate in the Phase II WIP development. The Secretary of Natural Resources appointed a Stakeholder Advisory Group (SAG) to support the State in the development of the Phase II WIP. The first SAG meeting was held on April 26, 2011 and was attended by HRPDC's representative, Jenny Tribo. Virginia's approach to Phase II WIP development centers on the State's Planning District Commissions playing an active role in local government coordination and stakeholder involvement.

Following Virginia's presentations on its approach to Phase II WIP development, the Hampton Roads localities have significant questions and concerns regarding the approach.

1. Timeframe – Virginia wants local governments to develop local conservation strategies by November 1, 2011. These strategies will outline what actions can be taken to reduce nutrients within a locality from each source sector (agriculture, wastewater, etc). In order to complete this exercise, local governments will need to engage stakeholders from each source sector, analyze local nutrient reduction targets, quantify existing nutrient reduction practices by source sector, and assess each source sector's capacity for reductions. Virginia does not plan to give localities nutrient reduction targets until August 1, 2011. Three months is not enough time for local governments to adequately perform the above tasks and develop a plan that will guide nutrient reduction activities for the next fourteen years.
2. Scale – EPA guidance on Phase II WIP development specifies that States must develop "local area" targets, but it does not define the term. Virginia has stated it will develop targets for each local government, but has also stated that other scales may be used. The definition of local is important because the scale at which the nutrient reductions are defined will determine the cost of the reductions and who has the authority or responsibility to ensure that they are achieved.
3. Use of the Chesapeake Bay Model to develop local targets –Virginia has indicated that it intends to provide local governments with nutrient load targets derived from the Chesapeake Bay Watershed Model (CBWM). The local governments will then be tasked with identifying local Best Management Practices (BMPs) that will then be

fed back into the CBWM to determine compliance with the TMDL. In its 2008 review of the CBWM, the Scientific and Technical Advisory Committee (STAC) commented that this is inappropriate, “the current CBWM implementation is not appropriate for development and implementation of TMDLs at the local watershed scale. A major barrier appears to be the scale of information built into the CBWM, which is based on the county level data and river reach segmentation at the 100 cfs threshold and designed for full watershed or major tributary scale analysis.” They suggested that localities should “make use of additional modeling tools and data to resegment, recalibrate and implement the model at appropriate local scales using more site specific local information. Local-scale data can be obtained from specific sampling and measurement, or from higher-resolution spatial data sources and modeling tools.”

4. Relationship between Municipal Separate Storm Sewer System (MS4) permits and the Phase II WIP Nutrient Targets – Virginia’s Phase II WIP approach focuses on establishing local non regulatory nutrient and sediment targets for localities. It has not identified how it will address targets for localities with MS4permits. The State needs to identify how it will separate load reduction targets for permitted sources within locality boundaries (VDOT, federal, and industrial sources) and how the Phase II WIP load targets will relate to future MS4 permits.
5. Accountability for nutrient reductions in non regulated areas – Given that the actions proposed in the Virginia WIP rely heavily on voluntary programs, what assurance, policies and procedures will the state provide or promulgate to ensure that future allocation changes to the permitted entities, such as MS4s and wastewater treatment plants, will be fair and equitable? Virginia needs to outline an approach for holding non regulated sources accountable for necessary nutrient reductions. Without accountability, the permitted sources could ultimately be held liable for all nutrient reductions. In order to participate in this process, permitted sources need some assurance that the nutrient reduction gaps identified during the Phase II WIP process will not be expected to be filled by them. contingency-related Phase III allocation changes to
6. Data and Tools – Localities cannot actively engage in the Phase II WIP process until Virginia provides them with the load reduction targets and BMP baseline data. Virginia also needs to provide guidance on the BMP efficiencies to be used (State or EPA) and tools that should be used for calculating nutrient reduction potential from various sources.
7. Funding – Localities/PDCs do not have the resources to fully participate in the planning process that the State has identified in its Phase II WIP approach. They will need additional technical and financial assistance from the State and EPA in order to develop meaningful nutrient reduction plans. In the future, they will need significant financial resources in order to implement these plans.